

Broadband Initiatives in Southern and Southwestern Virginia

Presented:

September 18, 2006

Cabinet Community Day

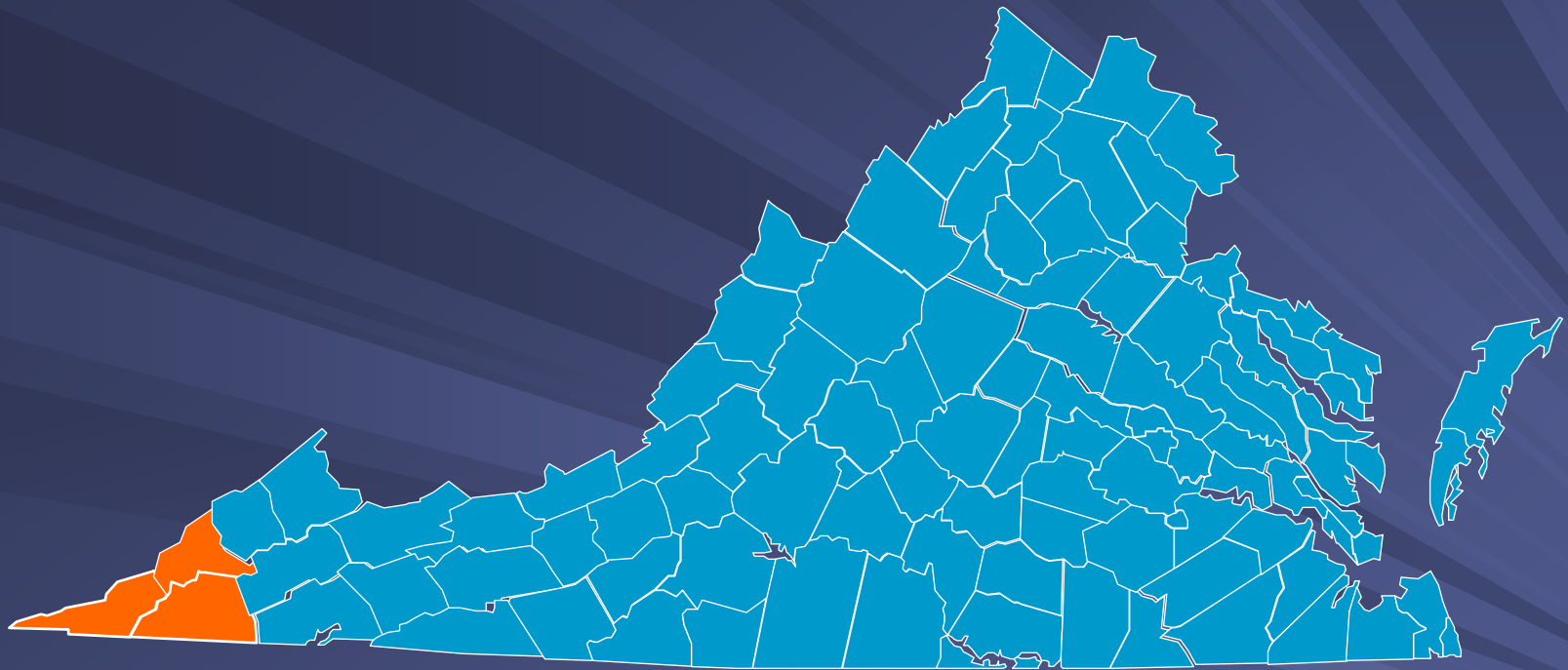
Southwest Virginia

UVA-Wise

Making it Happen

- **LENOWISCO Planning District**
- **Cumberland Plateau Planning District**
- **Bristol Virginia Utilities**
- **Citizens**
- **Mid-Atlantic Broadband Cooperative**

LENOWISCO



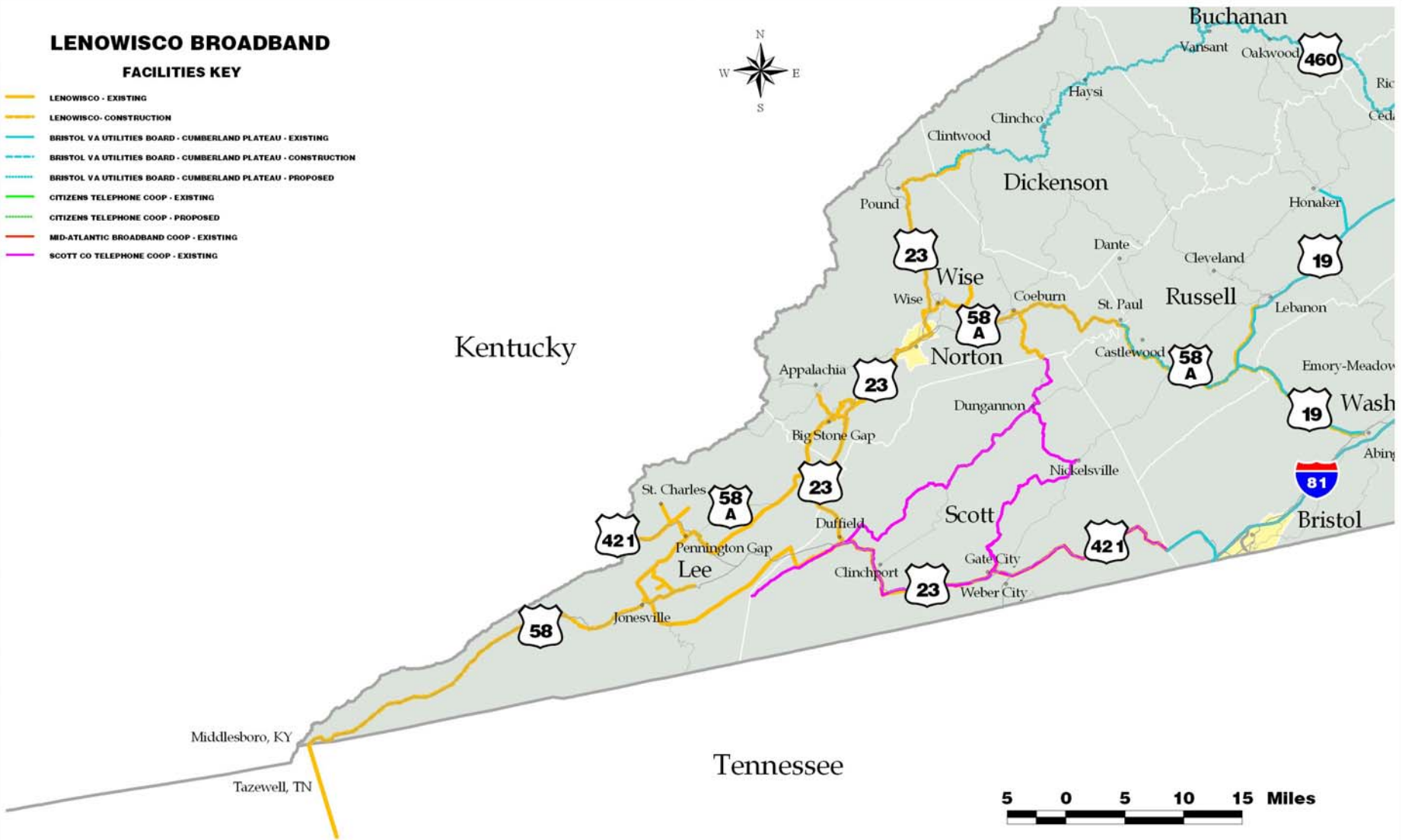
LENOWISCO Rural Area Network

- **144 miles of fiber backbone (in place or under construction) plus distribution fiber**
- **Backbone passes 29,666 households and businesses**
- **Active GigE Switched Network providing multipoint to multipoint connectivity.**
- **Public/Private partnerships with private vendors to construct and operate**
- **Support FTTH for quality of life, cottage industry, and local political support reasons**
- **Self-sustaining no growth positive cash flow at the end of March 2007**
- **Over 100 customers served with 225 on waiting list**
- **\$7.8 million dollar investment (local, state, federal)**

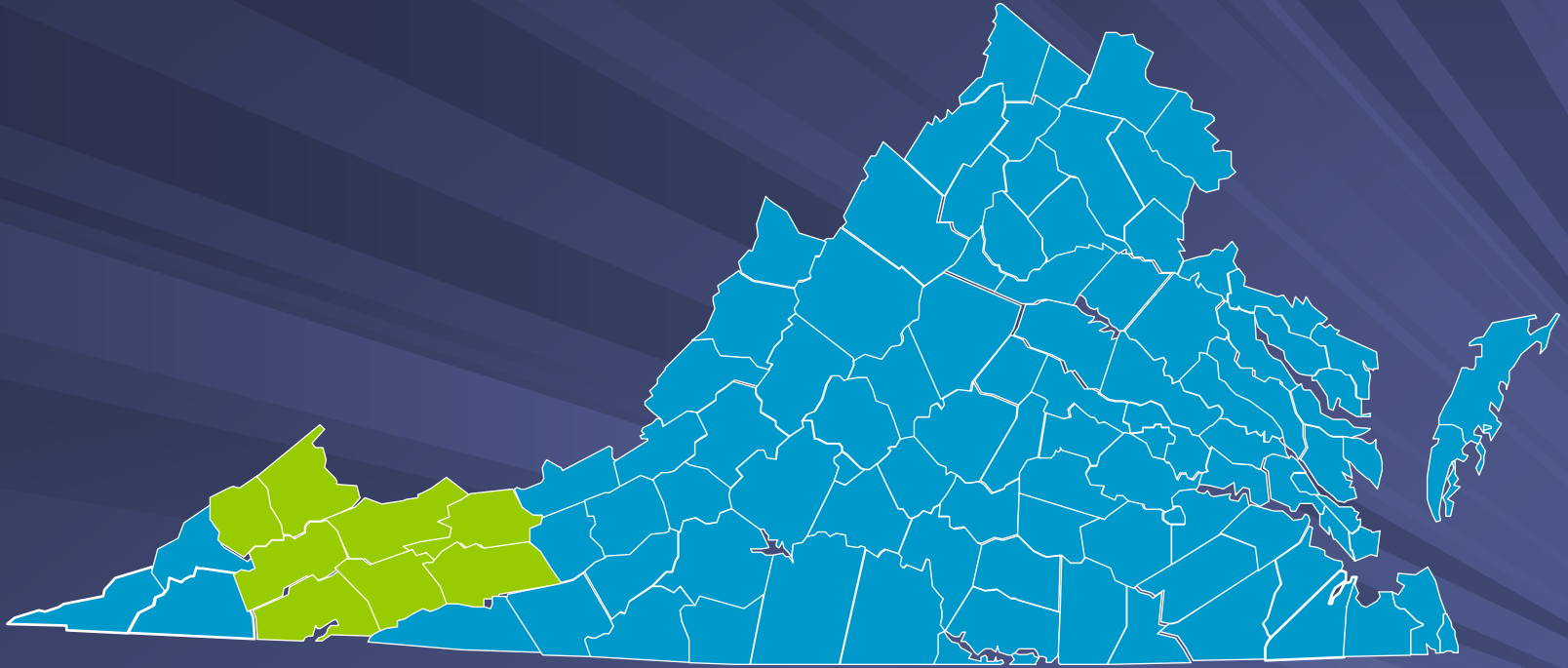
LENOWISCO BROADBAND

FACILITIES KEY

- LENOWISCO - EXISTING
- LENOWISCO - CONSTRUCTION
- BRISTOL VA UTILITIES BOARD - CUMBERLAND PLATEAU - EXISTING
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- BRISTOL VA UTILITIES BOARD - CUMBERLAND PLATEAU - PROPOSED
- CITIZENS TELEPHONE COOP - EXISTING
- CITIZENS TELEPHONE COOP - PROPOSED
- MID-ATLANTIC BROADBAND COOP - EXISTING
- SCOTT CO TELEPHONE COOP - EXISTING



Cumberland Plateau Bristol Virginia Utilities



Cumberland Plateau Company

Fiber-to-the-Business

Infrastructure from Abingdon to Richlands

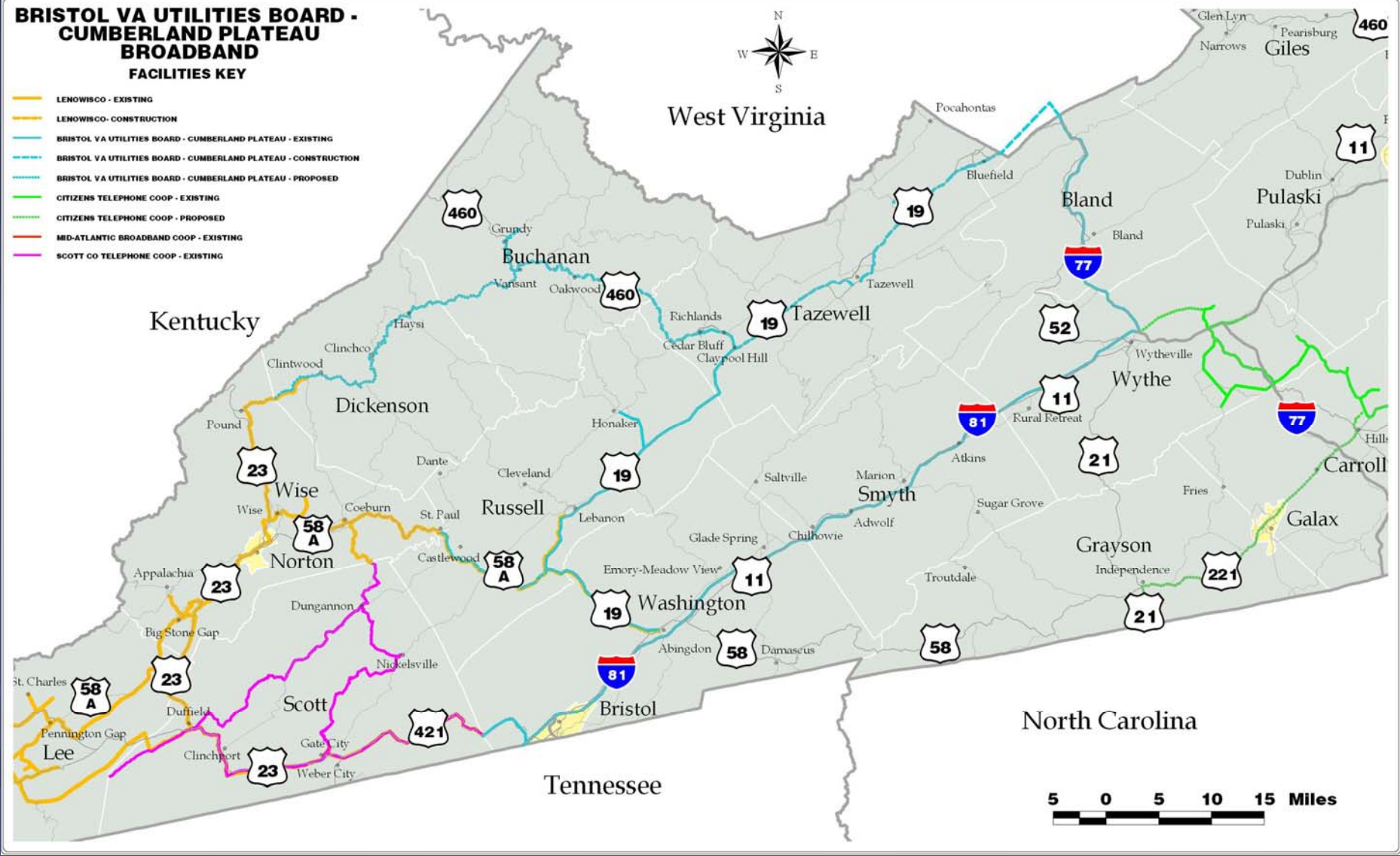
- **77 miles of fiber in Washington, Russell and Tazewell Counties**
- **Offering triple play (voice, video and broadband data services)**
- **Eight miles of fiber in Town of Richlands**
- **Service to four local governments, two hospitals and two school systems**
- **Over 400 commercial and industrial customers passed along the route**
- **\$25,695 per month in recurring revenue**

Bristol Virginia Utilities OptiNet Network

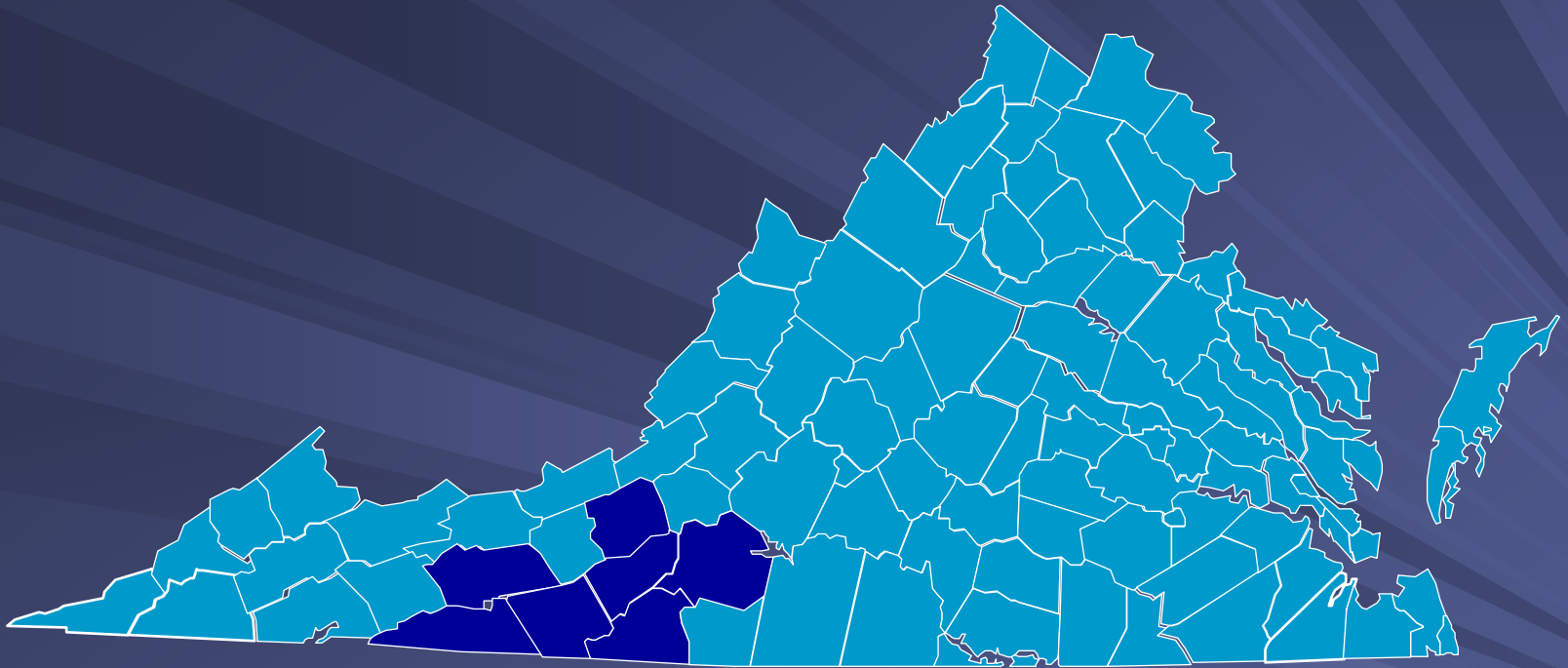
- **Voice/Data Backbone built on multiple 2.5Gbps self-healing resilient packet rings (RPR)**
- **Over 850 miles of fiber plant and 24x7 Network Operations Center**
- **Data Center w/co-location space and disaster recovery facilities**
- **Access networks consist of two architectures:**
 - **Passive Optical Network (ideal for voice data and CATV to business and residential customers)**
 - **Private Ethernet (ideal for transparent LAN applications and high-bandwidth IP-based services)**
- **In excess of 7,000 total customers (895 commercial/industrial, 6,270 residential, 6,000 telephone)**
 - **64% Broadband Penetration (4,560 customers)**
 - **6,158 CATV Customers**
- **Customers include six school systems, three Social Service Networks, two community colleges and 15 industrial parks.**
- **BVU has invested \$50 million to build this carrier class network infrastructure**

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Citizens



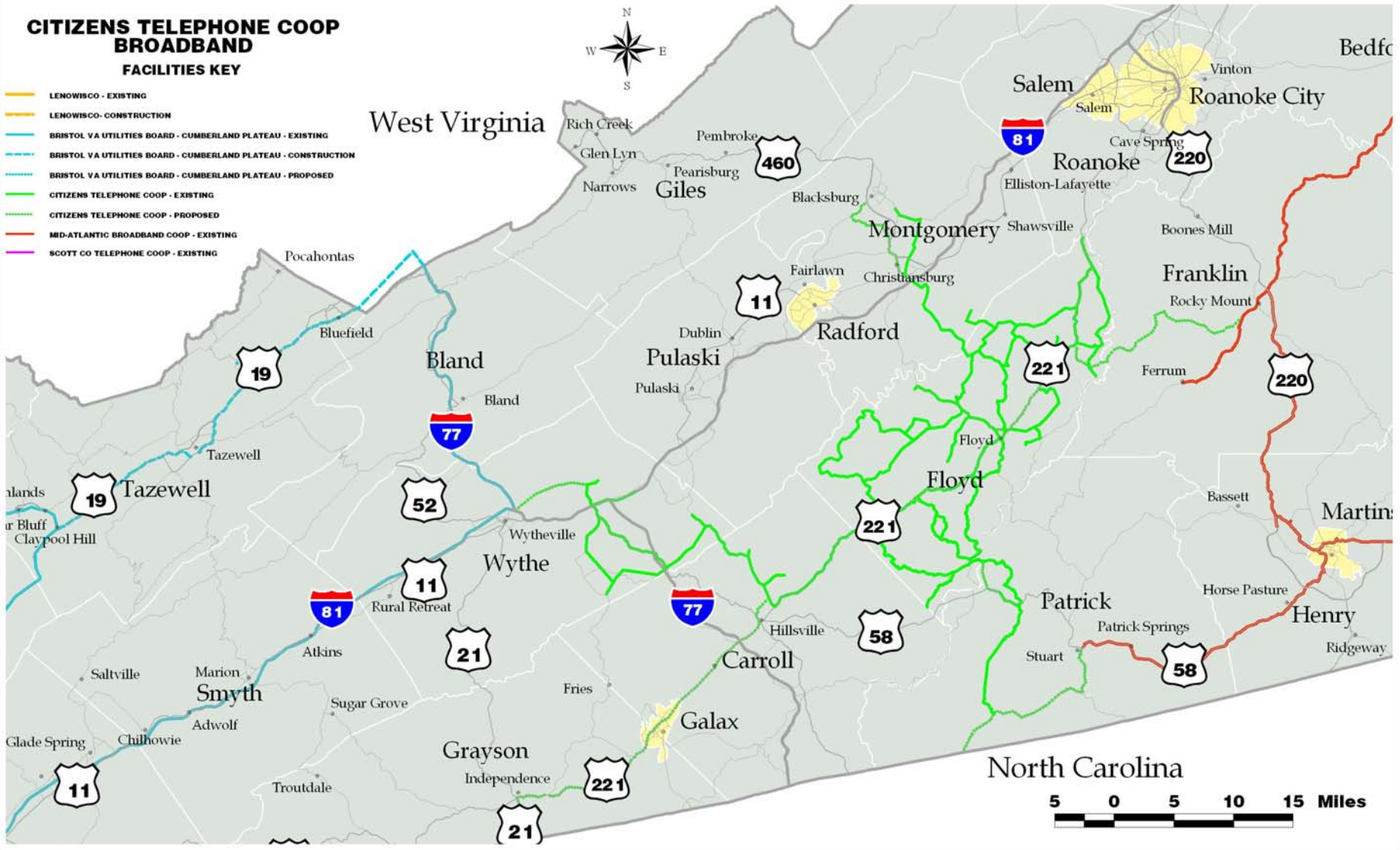
The Citizens Network

- Serve over 20,000 customers in 17 counties.
- Over 875 route miles of cable with over \$19 million invested in our telephone facilities.
- Offer long distance, high-speed internet, dial-up internet, and cable television
- Tobacco Regional Access Connection leverages Citizens existing fiber network to complete a core southern route through Virginia.
- A distribution fiber network is being deployed that will extend access to many small communities and eventually to individual premises
- The goal is to enable the Tobacco Region inhabitants to compete in the global information age economy with broadband or high speed data service.

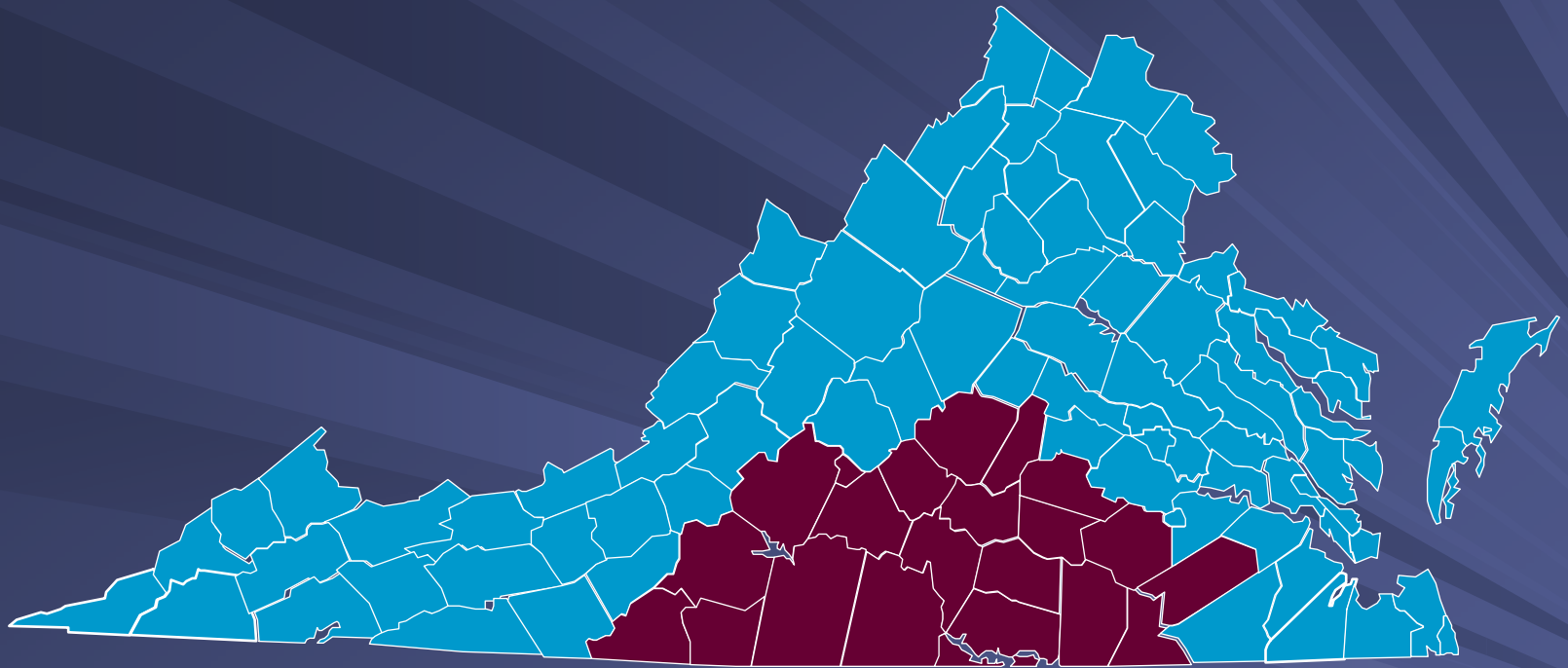
CITIZENS TELEPHONE COOP BROADBAND

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Mid-Atlantic Broadband Coop



The Mid-Atlantic Broadband Coop Network

- **700+ miles advanced open-access fiber network in 20 county region of Southside**
- **60+ business and industrial parks connected**
- **MBC Owns Long Haul Infrastructure to Atlanta and Washington, DC**
- **Wholesale network dedicated to open-access connectivity for the private sector**

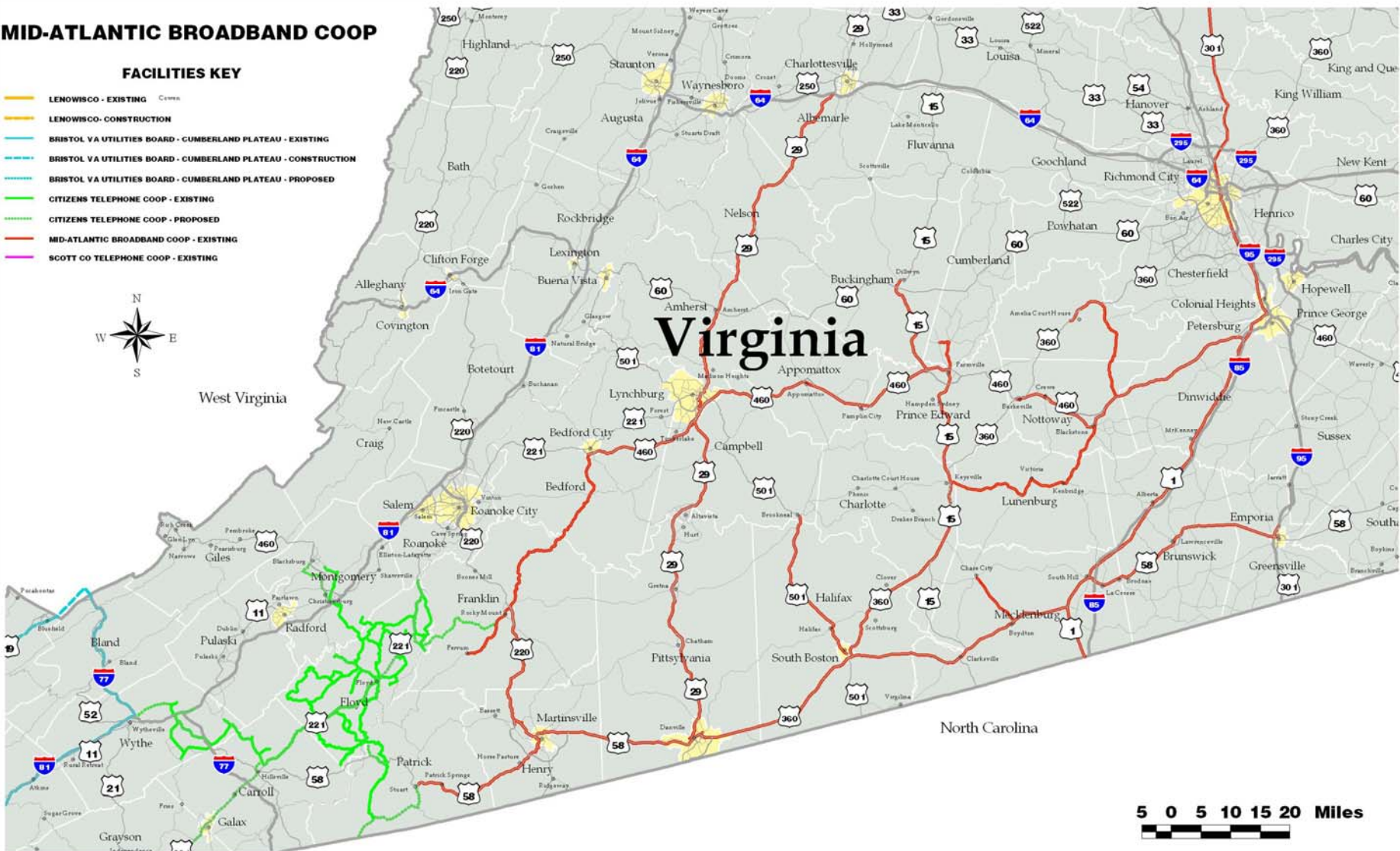
MID-ATLANTIC BROADBAND COOP

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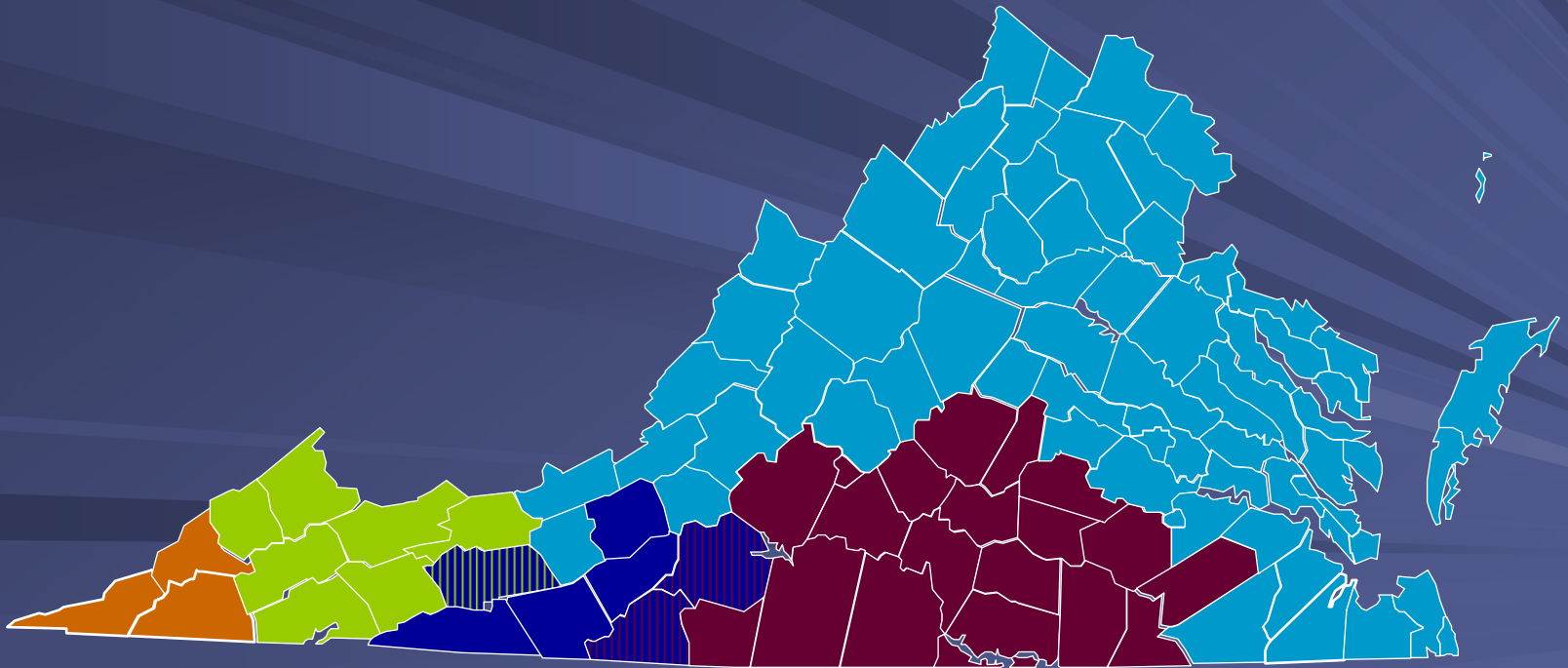


West Virginia



**Working Together for a
Brighter Future**

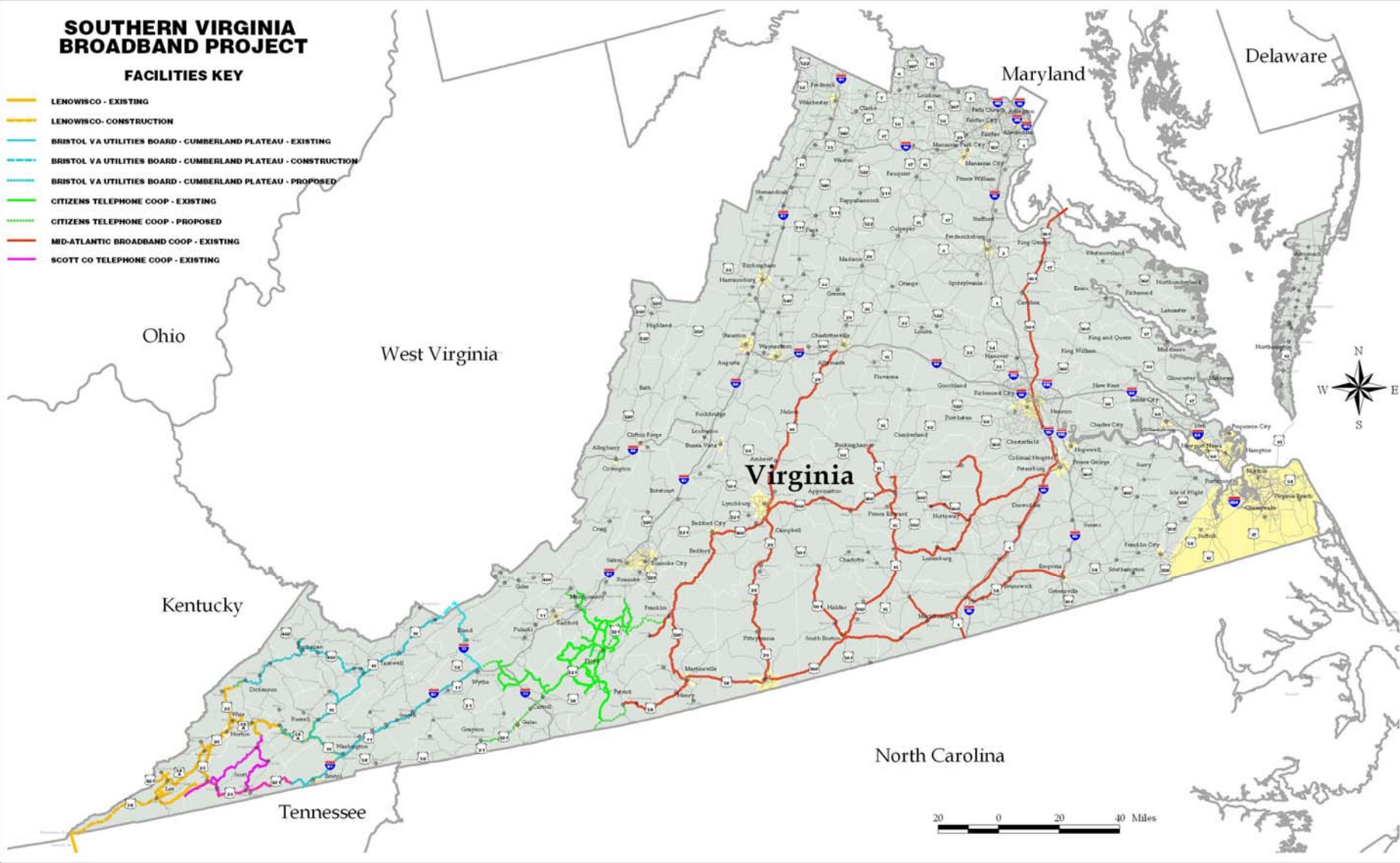
Success Stories



SOUTHERN VIRGINIA BROADBAND PROJECT

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Southside Success Stories

- Built foundation for technology growth in the region
- Centra Health Connectivity: Benefits to Farmville, Virginia
- Large Pharmaceutical Company using MBC for locating disaster recovery network: Southside, VA is the only site in their worldwide operations that has this capability.
- Highly engaged technology entrepreneurs working with MBC and communities

Southwest Success Stories

- **In excess of 1,100 new jobs**
 - KCG call center in Pennington Gap (100)
 - Results call center in Duffield (170)
 - Medical facility in Duffield (pending)
 - CGI-AMS in Lebanon - 350
 - VITA Data Center in Lebanon – 433
 - Crutchfield (retained) - 130

Both Northrop Grumman and CGI-AMS indicated that a primary reason for selecting Southwest Virginia was the recently installed telecommunications infrastructure

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